

§ 69.165

§ 69.165 Between-deck tonnage.

The between-deck tonnage provisions in § 69.111 apply, except that, under the Dual Measurement System, between-deck space extends from the tonnage deck to the uppermost complete deck, rather than from the line of the tonnage deck to the line of the uppermost complete deck.

§ 69.167 Superstructure tonnage.

The superstructure tonnage provisions in § 69.113 apply; except that, under the Dual Measurement System, spaces between the line of the uppermost complete deck and the uppermost complete deck itself due to a stepped uppermost complete deck are not included in the superstructure tonnage.

§ 69.169 Spaces exempt from inclusion in gross tonnage.

The tonnage of the following spaces is exempt from inclusion in gross tonnage:

- (a) Spaces listed in § 69.117(b) when located within the superstructure.
- (b) Spaces listed in § 69.117(c)(1) through (c)(3) when located above, but not on, the uppermost complete deck.
- (c) Spaces listed in § 69.117(f), regardless of location.
- (d) Spaces available for carrying dry cargo and stores when located on or above the uppermost complete deck.
- (e) When a vessel is assigned a tonnage mark and the tonnage mark is not submerged,—
 - (1) Spaces listed in § 69.117(b) when located between the uppermost complete deck and the second deck;
 - (2) Spaces listed in § 69.117(c)(1) through (c)(3) when located on the uppermost complete deck; and
 - (3) Spaces available for carrying dry cargo and stores when located between the uppermost complete deck and the second deck.

[CGD 87-015b, 54 FR 37657, Sept. 12, 1989, as amended by CGD 92-058, 57 FR 59938, Dec. 17, 1992]

§ 69.171 When the tonnage mark is considered submerged.

For the purpose of this subpart, a tonnage mark is considered submerged when—

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(a) In salt or brackish water, the upper edge of the tonnage mark is submerged; and

(b) In fresh or tropical water, the upper edge of the line for fresh and tropical waters is submerged.

§ 69.173 Tonnage assignments for vessels with only one deck.

A vessel without a second deck is assigned only one gross and one net tonnage. In calculating the gross tonnage, only the exemptions in § 69.169 (a) through (d) are allowed. Markings under § 69.177 are not permitted on these vessels.

§ 69.175 Tonnage assignments for vessels with a second deck.

(a) At the option of the vessel owner, a vessel having a second deck is assigned either two gross and two net tonnages or one gross and one net tonnage.

(b) If two gross and two net tonnages are assigned, the higher tonnages (i.e. those based only on exemptions under § 69.169 (a) through (d)) are applicable when the upper edge of the tonnage mark is submerged and the lower tonnages (i.e. those based only on all exemptions under § 69.169) are applicable when the upper edge of the tonnage mark is not submerged.

(c) If only the low gross and low net tonnages, as calculated under paragraph (b) of this section, are assigned, these tonnages are applicable at all times. On these vessels, the tonnage mark must be located in accordance with § 69.177(a)(6) at the level of the uppermost part of the load line grid.

§ 69.177 Markings.

(a) *Tonnage mark.* (1) All vessels with a second deck that are measured under the Dual Measurement System must have, on each side of the vessel, a tonnage mark, and an inverted triangle identifying the tonnage mark, as described and located under this section. (See the figure in § 69.183(a).) Vessels with only one deck are not assigned markings under this section.

(2) The tonnage mark is a horizontal line 15 inches long and one inch wide. The tonnage mark must be designated by a welded bead or other permanent

mark 15 inches long placed along the top edge of the tonnage mark.

(3) Above the tonnage mark is placed an inverted equilateral triangle, each side of which is 12 inches long and one inch wide, with its apex touching the upper edge of the center of the tonnage mark.

(4) If the vessel has a load line mark, the longitudinal location of the center of the tonnage mark must be between 21 inches and six feet six inches aft of

the vertical centerline of the load line ring. (See the figures in § 69.183 (b) and (c).) If the vessel does not have a load line mark, the center of the tonnage mark must be located amidships.

(5) Except as under paragraph (a)(6) of this section, the upper edge of the tonnage mark must be located below the line of the second deck at the distance indicated in Table 69.177(a)(5). (See the figure in § 69.183(b).)

TABLE 69.177(a)(5)—MINIMUM DISTANCE IN INCHES BETWEEN THE TONNAGE MARK AND THE LINE OF THE SECOND DECK

L (in feet)	L divided by D								
	12	13	14	15	16	17	18	19	20
220 and under	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
230	3.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
240	4.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
250	6.3	3.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0
260	8.0	4.8	2.1	2.0	2.0	2.0	2.0	2.0	2.0
270	9.9	6.4	3.5	2.0	2.0	2.0	2.0	2.0	2.0
280	11.8	8.1	4.9	2.1	2.0	2.0	2.0	2.0	2.0
290	13.9	9.9	6.5	3.5	2.0	2.0	2.0	2.0	2.0
300	16.0	11.7	8.1	4.9	2.1	2.0	2.0	2.0	2.0
310	18.3	13.7	9.8	6.4	3.5	2.0	2.0	2.0	2.0
320	20.7	15.8	11.7	8.1	4.9	2.1	2.0	2.0	2.0
330	23.2	18.0	13.6	9.8	6.4	3.5	2.0	2.0	2.0
340	25.9	20.4	15.7	11.6	8.1	4.9	2.1	2.0	2.0
350	28.7	22.9	17.9	13.6	9.8	6.5	3.6	2.0	2.0
360	31.7	25.5	20.2	15.7	11.7	8.2	5.0	2.2	2.0
370	34.7	28.3	22.7	17.9	13.6	9.9	6.6	3.7	2.0
380	38.0	31.1	25.3	20.2	15.7	11.8	8.3	5.2	2.4
390	41.3	34.1	27.9	22.6	17.9	13.8	10.1	6.8	3.8
400	44.8	37.2	30.7	25.0	20.1	15.8	11.9	8.4	5.3
410	48.2	40.3	33.5	27.7	22.6	18.1	14.0	10.4	7.2
420	51.5	43.4	36.4	30.4	25.2	20.6	16.4	12.7	9.7
430	54.8	46.5	39.4	33.3	27.9	23.2	19.0	15.2	11.8
440	58.4	49.9	42.6	36.4	30.9	26.0	21.7	17.8	14.4
450	62.1	53.4	46.0	39.6	33.9	29.0	24.6	20.6	17.1
460	65.9	57.0	49.5	42.9	37.1	32.1	27.6	23.5	19.9
470	69.8	60.7	53.0	46.3	40.4	35.2	30.6	26.5	22.8
480	73.7	64.4	56.5	49.7	43.7	38.4	33.7	29.5	25.7
490	77.5	68.1	60.0	53.0	46.9	41.5	36.7	32.4	28.5
500	81.2	71.6	63.4	56.2	50.0	44.5	39.6	35.2	31.2
510	84.9	75.1	66.7	59.4	53.0	47.4	42.4	37.9	33.9
520	88.4	78.4	69.9	62.4	55.9	50.2	45.1	40.5	36.4
530	91.8	81.6	72.9	65.3	58.7	52.9	47.7	43.0	38.8
540	95.2	84.8	75.9	68.1	61.4	55.5	50.2	45.4	41.2
550	98.4	87.8	78.8	70.9	64.0	58.0	52.6	47.8	43.4
560	101.6	90.8	81.6	73.6	66.6	60.5	55.0	50.1	45.6
570	104.8	93.8	84.4	76.3	69.2	62.9	57.3	52.3	47.8
580	107.9	96.8	87.2	78.9	71.7	65.3	59.6	54.5	49.9
590	111.0	99.7	90.0	81.5	74.2	67.7	61.9	56.7	52.0
600	114.0	102.5	92.6	84.0	76.5	69.9	64.0	58.8	54.0
610	117.0	105.3	95.2	86.5	78.9	72.1	66.2	60.8	56.0
620	120.0	108.0	97.8	88.9	81.2	74.4	68.3	62.8	58.0
630	122.9	110.7	100.4	91.3	83.5	76.6	70.4	64.8	59.9
640	125.7	113.4	102.9	93.7	85.8	78.7	72.4	66.8	61.7
650	128.6	116.1	105.4	96.1	88.0	80.8	74.4	68.7	63.6
660	131.4	118.7	107.8	98.3	90.1	82.8	76.3	70.6	65.3
670	134.2	121.2	110.2	100.6	92.2	84.8	78.3	72.4	67.1
680	136.9	123.8	112.8	102.9	94.3	86.8	80.2	74.2	68.9
690	139.6	126.3	115.0	105.1	96.4	88.8	82.1	76.0	70.6
700	142.3	128.8	117.3	107.3	98.5	90.8	83.9	77.8	72.3
710	144.9	131.3	119.6	109.4	100.5	92.7	85.7	79.5	73.9
720	147.5	133.7	121.8	111.5	102.5	94.6	87.5	81.2	75.5
730	150.1	136.1	124.0	113.6	104.5	96.5	89.3	82.9	77.1
740	152.7	138.5	126.2	115.7	106.5	98.3	91.5	84.5	78.7

TABLE 69.177(a)(5)—MINIMUM DISTANCE IN INCHES BETWEEN THE TONNAGE MARK AND THE LINE OF THE SECOND DECK—Continued

L (in feet)	L divided by D								
	12	13	14	15	16	17	18	19	20
750	155.3	140.8	128.5	117.8	108.4	100.1	92.8	86.1	80.3
760	157.8	143.1	130.6	119.7	110.3	101.9	94.4	87.8	81.7
770	160.2	145.4	132.7	121.7	112.1	103.6	96.0	89.3	83.2
780	162.6	147.6	134.8	123.7	113.9	105.3	97.6	90.8	84.7
790	165.1	149.9	136.9	125.6	115.7	107.0	99.2	92.3	86.1
800	167.5	152.1	138.9	127.4	117.4	108.6	100.8	93.8	87.4

L=the length in feet of the line of the second deck at the centerline of the vessel from the inner surface of the frames at the vessel's stern to the inner surface of the frames at the vessel's stern.

D=The vertical distance in feet from the top of the flat keel of the vessel to the line of the second deck.

EXAMPLE (1) For a vessel in which L=450 feet and L/D=15 feet, read down from the L/D column "15" and to the right on the column "450" to where the two columns intersect at 39.6. The tonnage mark must be located 39.6 inches below the line of the second deck.

EXAMPLE (2) If L or L/D is an intermediate number, the distance "a" between the tonnage mark and the line of the second deck must be obtained by linear interpolation. For a vessel in which L=424.80 feet and L/D=15.17:

L	Table L/ D=15	Actual L/ D=15.17	Table L/ D=16
Table 420	30.4	25.2
Actual 424.80	r	a	s
Table 430	33.3	27.9

Interpolation:

$$r=30.4+0.48(33.3-30.4)=31.79$$

$$s=25.2+0.48(27.9-25.2)=26.50$$

$$a=r-0.17(r-s)=31.79-0.17(31.79-26.50)=30.89 \text{ inches}$$

(6) For the following vessels with a load line mark, the upper edge of the tonnage mark must be located at the level of the uppermost part of the load line grid:

(i) Vessels assigned only one gross and one net tonnage under § 69.175(c).

(ii) Vessels for which a load line assigning authority certifies that the vessel's load line mark was located as though the second deck were the freeboard deck.

(b) *Line for fresh and tropical waters.*

(1) Except as under paragraph (b)(4) of this section, a horizontal line for fresh and tropical waters may be assigned at the vessel owner's request.

(2) The line must be nine inches long and one inch wide and located above and to the left of the tonnage mark at a distance equal to one forty-eighth of the distance from the top of the flat keel to the tonnage mark. The tonnage mark and the line for fresh and tropical waters must be connected by a vertical line one inch wide. (See the figure in § 69.183(a).)

(3) The line for fresh and tropical waters must be designated by a welded bead or other permanent mark nine inches long placed along the upper edge of the line.

(4) For vessels with a load line mark, if the load line assigning authority cer-

tifies that the load line mark was located as though the second deck were the freeboard deck, a line for fresh and tropical waters must not be placed on the vessel.

(c) *Freeboard deck mark.* A vessel assigned two gross and two net tonnages which has more than one deck and no load line mark assigned must have a mark on each side of the vessel with the same dimensions and location as the freeboard deck line mark under § 42.13-20 of this chapter, except that the mark must be located directly above the tonnage mark.

(d) *The line of the second deck.* The line of the second deck must not be marked on the side of the vessel.

(e) *Color of markings.* All markings under this section must be maintained in either a light color on a dark background or a dark color on a light background.

§ 69.179 Certification of markings.

(a) Before a certificate of measurement is issued for a vessel requiring a tonnage mark, a certification by a measurement organization under § 69.15 that all markings meet the requirements of this subpart is required.

(b) The Coast Guard, at any time, may verify markings under this subpart.

§ 69.181 Locating the line of the second deck.

(a) If the second deck is not stepped, the line of the second deck is the longitudinal line of the underside of the second deck at the side of the hull.